What Is Claimed Is:

1. An electrical connector for electrically interconnecting terminals on a flexible circuit member with terminals on a second circuit member, the electrical connector comprising:

a housing having a plurality of through holes extending between a first surface and a second surface, each of the through holes defining a central axis;

a plurality of elongated electrical contact members positioned in at least a portion of the through holes and oriented along the central axes, the electrical contact members having first ends extending above the first surface adapted to couple electrically with the terminals on the flexible circuit member, and second ends extending above the second surface to couple electrically with the second circuit member; and

a resilient member comprises a compliant encapsulating material interposed between a portion of the through holes and a portion of the electrical contact members to control movement of the electrical contact members along their respective central axes.

2. The electrical connector of claim 1 wherein first ends of the electrical contact members are attached to the terminals on the flexible circuit member.

3. The electrical connector of claim 1 wherein the flexible circuit member comprises singulated terminals.

4. The electrical connector of claim 1 wherein the resilient member further comprises a complaint material positioned along a surface of the flexible circuit member opposite the terminals of the flexible circuit member.

5. The electrical connector of claim 4 further including a back-up member supporting the complaint material.

6. The electrical connector of claim 1 wherein the second surface of the housing includes at least one device site corresponding to the second circuit member.

7. The electrical connector of claim 1 wherein the second ends of the electrical contact members have a shape that corresponds to a shape of the terminals on the second circuit member.

8. The electrical connector of claim 1 wherein the second ends of the electrical contact members are capable of engaging with a connector member selected from the group consisting of a flexible circuit, a ribbon connector, a cable, a printed circuit board, a ball grid array (BGA), a land grid array (LGA), a plastic leaded chip carrier (PLCC), a pin grid array (PGA), a small outline integrated circuit (SOIC), a dual in-line package (DIP), a quad flat package (QFP), a leadless chip carrier (LCC), a chip scale package (CSP), or packaged or unpackaged integrated circuits.

9. The electrical connector of claim 1 wherein the electrical contact members are one of a homogeneous material or a multi-layered construction.

10. The electrical connector of claim 1 wherein the electrical contact members have a cross-sectional shape selected from one of circular, oval, polygonal, and rectangular.

11. The electrical connector of claim 1 wherein a portion of the flexible circuit member is bonded to the first surface of the housing with an adhesive.

12. The electrical connector of claim 1 wherein the electrical contact members are electrically coupled to the flex circuit using one or more of a compressive

force, solder, a wedge bond, a conductive adhesive, an ultrasonic bond and a wire bond.

13. The electrical connector of claim 1 wherein the second ends of at least two of the electrical contact members extend beyond the second surface of the housing by a different amount.

14. The electrical connector of claim 1 wherein electrical contact members have a larger cross section proximate the first end than at the second end.

15. The electrical connector of claim 1 wherein the plurality of through holes are arranged in a two-dimensional array.

16. The electrical connector of claim 1 wherein the resilient member comprises a compliant encapsulating member elastically bonding the electrical contact members to the housing.

17. An electrical connector for electrically interconnecting terminals on a flexible circuit member with terminals on a second circuit member, the electrical connector comprising:

a housing having a plurality of through holes extending between a first surface and a second surface, each of the through holes defining a central axis;

a plurality of elongated electrical contact members positioned in at least some of the through holes and oriented along the central axes, the electrical contact members having first ends extending above the first surface that are attached to, and electrically coupled with, the terminals on the flexible circuit member, the flexible circuit member controlling movement of the electrical contact members along their respective central axes, and second ends extending above the second surface to couple electrically with the second circuit member.

18. The electrical connector of claim 17 wherein the flexible circuit member comprises singulated terminals.

19. The electrical connector of claim 17 comprising a complaint material positioned along a surface of the flexible circuit member opposite the terminals of the flexible circuit member.

20. The electrical connector of claim 17 comprising a compliant encapsulating member elastically bonding the electrical contact members to the housing.

21. The electrical connector of claim 17 wherein the second surface of the housing includes at least one device site.

22. The electrical connector of claim 17 wherein the second circuit member is one of a printed circuit board, a flexible circuit, a bare-die device, an integrated circuit device, an organic or inorganic substrate, a rigid circuit, or a wafer containing a plurality of integrated circuit devices.

23. The electrical connector of claim 17 wherein the second ends of the electrical contact members comprises one or more of die level test probes, wafer probes, and printed circuit board probes.

24. The electrical connector of claim 17 comprising a compliant encapsulating member elastically bonding the electrical contact members to the housing.

25. The electrical connector of claim 17 wherein a portion of the flexible circuit member is bonded to the first surface of the housing with an adhesive.

26. The electrical connector of claim 17 wherein the electrical contact members are electrically coupled to the flex circuit using one or more of compressive force, solder, a wedge bond, a conductive adhesive, an ultrasonic bond and a wire bond.

27. The electrical connector of claim 17 wherein the first end of at least one of the electrical contact members extends through the flexible circuit member.

28. The electrical connector of claim 17 wherein the flexible circuit member is folded over a resilient member to electrically couple two electrical interconnect assemblies in a stacked configuration.

29. The electrical connector of claim 17 wherein the flexible circuit member comprises electrical contact pads along a second surface thereof.

30. An electrical interconnect assembly using the electrical connector of claim 21 comprising:

a flexible circuit member having a plurality of terminals;

a first housing having a plurality of through holes extending between a first surface and a second surface, each of the through holes defining a central axis, a plurality of elongated electrical contact members positioned in at least some of the through holes and oriented along the central axes, the electrical contact members having first ends extending above the first surface that are attached to, and electrically coupled with, terminals on the flexible circuit member, the flexible circuit member controlling movement of the electrical contact members along their respective central

axes, and second ends extending above the second surface to couple electrically with the second circuit member;

a second housing having a plurality of through holes extending between a first surface and a second surface, each of the through holes defining a central axis, a plurality of elongated electrical contact members positioned in at least some of the through holes and oriented along the central axes, the electrical contact members having first ends extending above the first surface and electrically coupled to terminals on the flexible circuit member, and second ends extending above the second surface to couple electrically with the third circuit member, the first surface of the first housing being positioned opposite the first surface of the second housing; and

a resilient member controlling movement of the electrical contact members in the second housing along their respective central axes.

31. A method of making an electrical interconnect comprising the steps of:

providing a housing with a plurality of through holes extending between a first surface and a second surface, each of the through holes defining a central axis;

positioning a plurality of elongated electrical contact members in at least some the through holes oriented along the central axes, the electrical contact members having first ends extending above the first surface;

retaining the electrical contact members in the through holes; and

attaching and electrically coupling the first ends of the electrical contact members to the terminals on a flexible circuit member to control movement of the electrical contact members along their respective central axes and so that the second ends extending above the second surface.

32. The method of claim 31 comprising the step of bonding the electrical contact members to the housing using a complaint material.

33. The method of claim 31 comprising the step of singulating one or more of the terminals on the flexible circuit member.

34. The method of claim 31 wherein the step of retaining the electrical contact members in the through holes comprises interposing a compliant encapsulating material between a portion of the through holes and a portion of the electrical contact members.

35. The method of claim 31 wherein the step of retaining the electrical contact members in the through holes comprises surrounding a portion of the electrical contact members with a compliant encapsulating material along the first surface of the housing.

36. The method of claim 31 wherein the step of retaining the electrical contact members in the through holes comprises positioning a complaint material along a surface of the flexible circuit member opposite the terminals.

37. The method of claim 31 comprising positioning a complaint material along a surface of the flexible circuit member opposite the terminals.

38. The method of claim 31 comprising the step of modifying the second ends of the electrical contact members to have a shape capable of engaging with a second circuit member selected from the group consisting of a flexible circuit, a ribbon connector, a cable, a printed circuit board, a ball grid array (BGA), a land grid array (LGA), a plastic leaded chip carrier (PLCC), a pin grid array (PGA), a small outline integrated circuit (SOIC), a dual in-line package (DIP), a quad flat package (QFP), a leadless chip carrier (LCC), a chip scale package (CSP), packaged and unpackaged integrated circuits.

39. The method of claim 31 wherein the electrical contact members are electrically coupled to the flex circuit using one or more of compressive forces, solder, wedge bonding, conductive adhesives, ultrasonic bonding and wire bonding.

40. The method of claim 31 comprising the step of engaging the second ends of the electrical contact members with a second circuit member.

41. The method of claim 31 comprising the step of preparing at least one device site on the second surface of the housing.

42. A method of making an electrical interconnect for electrically coupling terminals on a flexible circuit member with terminals on a second circuit member, comprising the steps of:

providing a housing having a plurality of through holes extending between a first surface and a second surface, each of the through holes defining a central axis;

positioning a plurality of elongated electrical contact members in at least some of the through holes oriented along the central axes, the electrical contact members having first ends extending above the first surface; and

interposing a compliant encapsulating material between a portion of the through holes and a portion of the electrical contact members to control movement of the electrical contact members along their respective central axes.